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DATE MAILED: 03/24/2010

NOTICE OF ALLOWANCE AND FEE(S) DUE

22434 7590 03/24/2010 Weaver Austin Villeneuve & Sampson LLP P.O. BOX 70250 OAKLAND, CA 94612-0250 EXAMINER

SKIBINSKY, ANNA

ART UNIT PAPER NUMBER

1631

6357

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO.

10/629,351 07/29/2003 Claes Gustafsson MXGNP004X1/0311.310
TITLE OF INVENTION: METHODS, SYSTEMS, AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES

APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/24/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless correcte maintenance fee notifical	correspondence includir ed below or directed oth	ng the Patent, advance of nerwise in Block 1, by (orders and notification of r (a) specifying a new corres	naintenance fees w pondence address;	ill be and/or	mailed to the current (b) indicating a sepa	
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							(Depositor's name)
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							(Date)
APPLICATION NO. FILING DATE			FIRST NAMED INVENTOR		ATTORNEY DOCKET NO. CONFIRMATION NO		
10/629,351 TITLE OF INVENTION	07/29/2003 : METHODS, SYSTEM	IS, AND SOFTWARE F	Claes Gustafsson OR IDENTIFYING FUNC	TIONAL BIOMOL		NP004X1/0311.310 ES	6357
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nonprovisional	NO	\$1510	\$300	\$0		\$1810	06/24/2010
EXAM	INER	ART UNIT	CLASS-SUBCLASS				
SKIBINSK	Y, ANNA	1631	702-019000				
"Fee Address" ind. PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 12 or more recent) attach ND RESIDENCE DATZ less an assignee is ident h in 37 CFR 3.II. Comp	inge of Correspondence Indication form and. Use of a Customer A TO BE PRINTED ON	2. For printing on the p (I) the names of up to or agents OR, alternativ (2) the name of a singl registered attorney or 2 2 registered patent atto listed, no name will be THE PATENT (print or typ data will appear on the p DT a substitute for filing an (B) RESIDENCE: (CITY)	3 registered patent vely, e firm (having as a kagent) and the name meys or agents. If a printed. be) atent. If an assigne assignment.	memb es of up to nam	er a 2	locument has been filed for
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	s SMALL ENTITY state	as. See 37 CFR 1.27.	b. Applicant is no lon				
NOTE: The Issue Fee and interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademar	ed from anyone other than t k Office.	he applicant; a regi	stered a	uttorney or agent; or th	ne assignee or other party in
Authorized Signature				Date			
Typed or printed name	e			Registration N	o		
This collection of inform an application. Confident submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C tiality is governed by 35 d application form to the ons for reducing this but firginia 22313-1450. DC 13-1450.	CFR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will var rden, should be sent to the ONOT SEND FEES OR	ion is required to obtain or r 1.14. This collection is est y depending upon the indivi- he Chief Information Office COMPLETED FORMS TO	retain a benefit by the imated to take 12 n idual case. Any co er, U.S. Patent and O THIS ADDRESS	ne publ ninutes mment Fraden . SENI	ic which is to file (and to complete, includir s on the amount of tin ark Office, U.S. Dep O TO: Commissioner	I by the USPTO to process ig gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,351	07/29/2003	Claes Gustafsson	MXGNP004X1/0311.310	6357
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Weaver Austin Villeneuve & Sampson LLP			SKIBINSK	Y, ANNA
P.O. BOX 70250			ART UNIT	PAPER NUMBER
OAKLAND, CA 94612-0250			1631	

DATE MAILED: 03/24/2010

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 47 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 47 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)
10/629,351	GUSTAFSSON ET AL.
Examiner	Art Unit
ANNA SKIBINSKY	1631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to 3/10/2009.
- The allowed claim(s) is/are 76,78,79,81,102-108 and 120-129.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - b) ☐ Some* c) ☐ None of the: a) \square All
 - 1. T Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No.
 - 3.
 ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of

each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. | Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08). Paper No./Mail Date 6/01/2004; 2/24/2010
- 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. X Examiner's Amendment/Comment
- 8. T Examiner's Statement of Reasons for Allowance
- Other .

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DETAILED ACTION

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jeff Weaver on February 22, 2010.

Information Disclosure Statement

The 1449 of the IDS filed 6/1/2004 has been included herein because several of the reference cited (i.e., C56, C72, C82, C83 and C91) did not have dates. The reference citations have been corrected by the Examiner to include the dates.

In the claims:

In claim 76, lines 7-9, delete "specifying the presence or absence of nucleotides at corresponding positions in the nucleotide sequence"; and insert --each specifying the presence or absence of a nucleotide, identity of said nucleotide, and position of said nucleotide in a nucleotide sequence--

In claim 76, line 11, delete "/or nucleotide types at specific"; and insert --nucleotide types at the ranked--

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Art Unit: 1631

In claim 76, line 14, after "desired activity"; insert --, wherein the nucleotides to be varied include codons encoding particular amino acids--

In claim 78, change to depend from claim 76

In claim 79, line 1, delete "machine readable storage"; insert –tangible machine readable medium—

In claim 79, lines 10-11, delete "specifying the presence of absence of nucleotides at corresponding positions in the nucleotide sequence"; and insert --cach specifying the presence or absence of a nucleotide, identity of said nucleotide, and position of said nucleotide in a nucleotide sequence--

In claim 79, line 13, delete "/or nucleotide types at specific"; and insert --nucleotide types at the ranked—

In claim 79, line 15-16, delete "/or the nucleotide types at specific"; and insert—the nucleotide types at the ranked—

In claim 79, line 18, after "desired activity"; insert --, wherein the nucleotides to be varied include codons encoding particular amino acids--

Cancel claim(s): 77 and 80.

New claim(s):

--126(New). The method of claim 76, wherein the presence or absence of a nucleotide, as specified by an independent variable, is represented by a bit value.—

--127(New). The method of claim 76, wherein the independent variables have associated coefficients specifying a magnitude of contribution of independent nucleotides at their corresponding positions to said activity.

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Art Unit: 1631

--128(New). The computer program products of claim 79, wherein the presence or absence of a nucleotide, as specified by an independent variable, is represented by a bit value.—

--129(New). The computer program products of claim 79, wherein the independent variables have associated coefficients specifying a magnitude of contribution of independent nucleotides at their corresponding positions to said activity.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anna Skibinsky whose telephone number is (571) 272-4373. The examiner can normally be reached on 8 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marjoric Moran can be reached on (571) 272-0720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anna Skibinsky /AS/

Examiner, Art Unit 1631

/John S. Brusca/

Primary Examiner, Art Unit 1631